

IN THE CLAIMS

1. (currently amended): A massage machine for giving massage by therapeutic members to ~~the a person to be~~ being massaged, the massage machine ~~being useful for health care and comprising a living body information~~

a sensor for detecting living body information a physiological quantity related to a state of the autonomic nervous system of the person being massaged,

means for judging the psychological state of the person being massaged based on the ~~living body information~~ physiological quantity detected, and

means for holding histories of psychological states of ~~persons to be~~ the person being massaged;

wherein the means for judging the psychological state of the person being massaged judges the psychological state based on a time rate of change of the physiological quantity.

a 2. (currently amended): ~~A~~ The massage machine ~~for health care~~ according to claim 1, wherein the ~~living body information~~ sensor includes one or a plurality of sensors ~~selected from among~~ detecting at least one of a galvanic skin response sensor, a pulse sensor and a skin temperature sensor.

3. (currently amended): ~~A~~ The massage machine ~~for health care~~ according to claim 2, wherein ~~when the living body information sensor~~ the sensor comprises ~~the a~~ galvanic skin response sensor, and the means for judging the psychological state ~~judging means~~ interprets ~~an impaired a decreasing~~ galvanic skin response as indicating a relaxed state, and a higher rising galvanic skin response as indicating a tense state.

4. (currently amended): ~~A~~ The message machine ~~for health care~~ according to claim 2, wherein ~~when the living body information sensor~~ the sensor comprises ~~the~~ a pulse sensor, and the means for judging the psychological state ~~judging means~~ interprets a ~~reduced~~ reducing pulse rate as indicating a relaxed state, and an ~~increased~~ increasing pulse rate as indicating a tense state.

5. (currently amended): ~~A~~ The message machine ~~for health care~~ according to claim 2, wherein ~~when the living body information sensor~~ the sensor comprises ~~the~~ a skin temperature sensor, and the means for judging the psychological state ~~judging means~~ interprets a rise in the skin temperature as indicating a relaxed state, and a drop in the skin temperature as indicating a tense state.

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6. (currently amended): ~~A~~ The message machine for health care according to claim 2, wherein the means for judging the psychological state ~~judging means~~ judges ~~the~~ a level of activity of the person in accordance with variations in at least one item of ~~living body information~~ physiological quantities selected from among galvanic skin response, pulse rate and skin temperature, and interprets low activity as indicating a relaxed state and high activity as indicating a tense state.

7. (currently amended): ~~A~~ The message machine for health care according to claim 1, wherein the ~~history holding means~~ means for holding histories comprises means for counting ~~the~~ a frequency with which the person is judged to be in a tense state when massaged at each of different body parts, and the count obtained by the counting means is held as a history of the psychological state.

8. (currently amended): ~~A~~ The massage machine for health care according to claim 7, which comprises means for displaying variations in the count involved in massaging a particular one of the body parts.

9. (currently amended): A physiological quantity control and measuring circuit for a ~~massage machine, the circuit~~ detecting a physiological quantity of the person ~~to be massaged by a~~ physiological quantity sensor and controlling the massage operation of the machine based on variations in the physiological quantity, the measuring circuit comprising:

at least one sensor, sensing a single physiological quantity;

a detection circuit having the sensor connected thereto; and a signal processing circuit, for producing physiological quantity data based on a physiological quantity signal obtained from the sensor, detection circuit, the physiological quantity detection circuit comprising a plurality of signal converters each adapted to receive the physiological quantity as an input signal from the sensor and deliver the detection signal as an a respective output signal corresponding to the single physiological quantity,

the signal converters exhibiting respective different kinds of signal conversion characteristics which are different in the relationship of the output signal ~~with~~ to the input signal, the different kinds of signal conversion characteristics overlapping each other in the an input range of the input signal, signals to be processed by the converter,

the detection and signal processing circuit being operable to produce ~~a series of items of~~ physiological quantity data to control the massage operation based on the output signal, regardless of how many of the signal converters are used to convert the input signal into the output signal.

~~in the process of giving the same massage to the same body part based only on physiological~~

~~quantity detection signals resulting from one of the different kinds of signal conversion characteristics of the detection circuit when said resulting detection signals are all included within an effective output range of said one kind of signal conversion characteristics, or to produce a series of items of physiological quantity data in the process based on physiological quantity detection signals resulting from one kind of or the different kinds of signal conversion characteristics when otherwise.~~

10. (currently amended): A The physiological quantity control and measuring circuit according to claim 9, wherein the ~~physiological quantity~~ sensor is a skin temperature sensor for measuring skin temperature, and the ~~physiological quantity detection and signal processing~~ circuit ~~has~~ includes two kinds of the signal conversion characteristics respectively for low temperatures and high temperatures which partly overlap each other in the temperature range to be measured.

11. (currently amended): A The physiological quantity control and measuring circuit according to claim 10, wherein the signal processing circuit produces a series of items of skin temperature data in the process of giving the same massage to the same body part based only on physiological quantity detection signals resulting from the low-temperature signal conversion characteristics when said resulting detection signals are all included within the effective output range of the low-temperature signal conversion characteristics, or to produce a series of items of skin temperature data in the process based on physiological quantity detection signals resulting from the two kinds of signal conversion characteristics for high and low temperatures when ~~otherwise: said resulting detection signals are not all included within the effective output range of the low-temperature signal conversion characteristics.~~

12. (currently amended): ~~A~~ The physiological quantity control and measuring circuit according to claim 9, wherein the ~~physiological quantity~~ sensor is a perspiration quantity sensor for measuring the resistance value between a pair of electrodes, and the ~~physiological quantity~~ detection circuit ~~has~~ includes two kinds of the signal conversion characteristics respectively of low gain and high gain which overlap each other in the range of resistance values to be measured.

13. (currently amended): ~~A~~ The physiological quantity control and measuring circuit according to claim 12 wherein the signal processing circuit produces a series of items of perspiration quantity data in the process of giving the same massage to the same body part based only on physiological quantity detection signals resulting from the high-gain signal conversion characteristics when said resulting detection signals are all included within the effective output range of the high-gain signal conversion characteristics, or to produce a series of items of perspiration quantity data in the process based on physiological quantity detection signals resulting from the low-gain signal conversion characteristics when ~~otherwise~~ said resulting detection signals are not all included within the effective output range of the high-gain signal conversion characteristics.
